A Bibliography on Temporal Databases
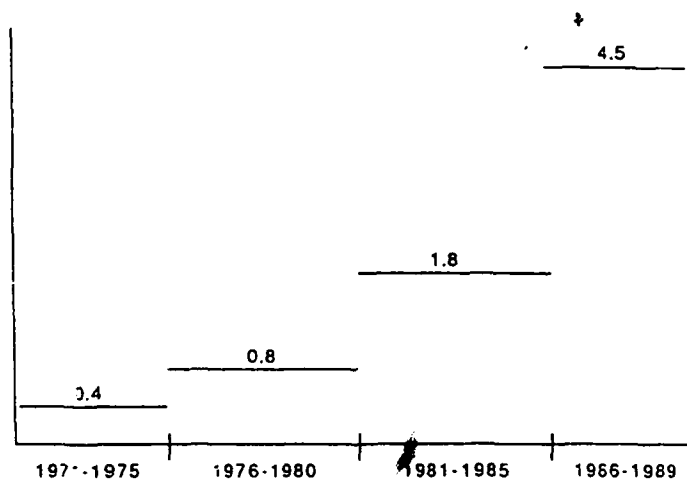
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1 Introduction

This bibliography is an update of a 1986 bibliography (McKenzie, E. *Bibliography: Temporal Databases, ACM SIGMOD Record*, 15, No. 4, Dec. 1986, pp. 40-52), which was in turn an update of a 1982 survey (Bolour, A., T.L. Anderson, and H.K.T. Wong, *The Role of Time in Information Processing: A Survey, SIGArt Newsletter*, 80, April 1982, pp. 28-48) This bibliography consists of papers published or accepted for publication since the previous bibliography, as well as older papers that have not appeared in these previous surveys.

The pre-1982 survey, covering 1960-1982, contained 16 papers specifically relating time to database management, with 5 appearing in journals. The McKenzie bibliography, covering the next five years (1982-1986), listed over 80 papers on this subject, with 10 appearing in journals. This bibliography, covering the next 21 months (Jan. 1987 through September, 1988), lists over 100 papers, with 18 appearing in journals. During this period, the first conference on the topic was held (TAIS: Conference on Temporal Aspects in Information Systems, May, 1987). Our conclusion is that the field is growing rapidly and seems to be maturing, as more papers appear in journals (Figure 1 illustrates that the growth remains exponential).

Figure 1: Average Number of Journal Papers Appearing Annually

2   Transaction Time

As defined above, transaction time concerns the time when data is entered into the database. Relations that contain transaction time are termed *rollback* relations.

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4   Both Transaction and Valid Time

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